

NOTES IN THE PROVINCES.

Nottingham.—The site for the church cemetery is now fenced out. An open space of eighty acres immediately adjoins it. More than 800 out of the 1,000 shares have been sold by the committee.

Lutterworth.—A national school has been erected at South Kilworth. The design is said to have been furnished by the Rev. Mr. James, of Theddingworth, and the work was executed by Messrs. R. and J. Law, of Lutterworth, builders.

Heyford.—Steeple Baston Church has been entirely rebuilt, and was re-opened on Friday, in week before last. The cost of the building is about 1,200*l.*, which has been realised chiefly by mortgaging the church rates for twenty years.

Crewe.—The site of the town of Crewe was sold twenty years ago to the late Mr. Edleston, at the rate of 5*l.* an acre. The present lord of the manor is said to be in receipt of 1,500*l.* an acre for land set out for building purposes!

Liverpool.—At a recent meeting of the Dock Committee, the Sub-committee of Works submitted plans for warehouses on the east side of the Wapping Dock. The plan included the erection of nine free warehouses as the best arrangement for light. The surveyor was required to furnish plans of warehouses with vaults. A notice of motion has been given "that the sub-committee of works do forthwith furnish estimates for warehouses on the quays of Stanley Dock or other north dock, as an introduction to an extension of dock warehouses on the quays of the northern docks." A letter from Mr. J. H. Howard, of London, calling attention to the invention of a new motive power for cranes, was referred to the Committee of Works. The advantages of the new power were said to be that, without the aid of steam, a weight of 33,000 lbs. might be raised one foot high in a minute. The crane was also not liable to get out of order; a child might direct its operations, and the expense was only twelve guineas. This looks a little like the hydraulic crane, introduced with so much success at the quays at Newcastle. The net cost of the Albert Docks was stated to be 319,491*l.*, and of the warehouses 434,809*l.*

Southwell.—The work of restoration and adornment has been for some time progressing in the collegiate church. The lath and plaster work that blocked up the clerestory in the nave has been removed, whitewash scraped off, and the masonry of several of the arches and Norman windows (formerly debased Gothic interpolations), repaired and restored. Four more stained glass windows have also been put up (making in all seven within the last three years), designed and executed by the Messrs. O'Connor, of Berners-street. Three of these are memorial windows, the subjects of which are, "Our Lord among the Doctors, blessing the little Children, and the commission of the Apostles;" "Our Lord healing the Sick, teaching out of the Ship, and at the Pool of Bethesda;" and "The raising of Jairus' Daughter." The fourth window is an offering from the artists: the subject is, "The Virgin and Child within a vesica piscis," being the ancient seal of the chapter of Southwell. Two of these windows and the altar furniture were in the Great Exhibition.

Andover.—We are requested to state that the architect of the works in the church of St. Mary the Virgin, Venham Dean, referred to in our last number, was Mr. Arthur Ashpitel.

Burnley.—The Mechanics' Institution building, the foundation-stone of which was laid on Tuesday in week before last, in the midst of a general half holiday, is to be erected from a design by Mr. James Green, of Portsmouth, near Todmorden; the masons' work being contracted for by Mr. R. Smith, and the carpentry by Mr. W. Parke. The building, of which the *Preston Guardian* speaks of giving an engraving, will have two principal fronts—to Market-street and York-street—and will be of the Italian style of architecture. These fronts will be built of stone from the Catlow Quarry, in Marden, and will be wholly of polished ashlar, except the channelled rustic dressings

to ground floor windows, which will be in cone-picked and frosted work. The principal entrance will be from York-street, and will have a portico, consisting of four disengaged and coupled Corinthian columns, supporting entablature and balustrade. In all 25 feet high. The entrance-hall on ground-story is to be approached by twelve steps, and opening out of it, to the right and left, will be reading-room, 28 feet square; news-room, 35 feet by 28 feet; library, 29 feet by 17 feet; also committee-room and large staircase to lecture and assembly-room on first floor. A portion of ground-floor fronting Market-street will be appropriated to two shops or offices, each 28 feet by 18 feet. The first floor will be devoted wholly to the purpose of a public hall for lectures and assemblies, and is 72 feet long by 51 feet wide, exclusive of ladies' and gentlemen's ante and retiring rooms; over which will be a gallery the full length of room. The walls of lecture-hall are to have Corinthian columns and pilasters, forty-six in number, supporting entablature with modillion cornice. The room will be 25 feet in height, and will have a covered and panelled ceiling, with a large circular dome or lantern of stained glass in the centre. Spacious class-rooms, also lodging and living rooms for a resident porter will be provided in the basement story, under the whole of which will be store vaults, fire-proof. The whole of the building will be heated with hot water, and provision made for ventilation. The entire cost of the structure will be about 4,500*l.* towards which about 2,000*l.* have already been subscribed.

Wigan.—The churchwardens have published their account for the parish church restoration. It gives the following items of receipts:—Subscriptions from parishioners, from 1845 to 1851 inclusive, 3,821*l.* 5*s.* 6*d.*; subscriptions of non-parishioners, including special donations, 544*l.* 5*s.* 4*d.*; interest from 1845 to 1851, inclusive, 195*l.* 11*s.* 5*d.*; Mrs. Kenyon, for the stained glass window, east of chancel, 500*l.*; various persons, for the stained glass windows west of the nave, 389*l.* 5*s.* 1*d.*; various persons, for restoring the old church organ, 125*l.* 13*s.* 9*d.*; the rev. the rector, for rebuilding the chancel, &c., 1,164*l.* 14*s.* 2*d.*; the Earl of Crawford and Balcarres, for rebuilding his chapel, 1,059*l.* 10*s.* 6*d.*; from the parish rates, from 1845 to 1850, 1,033*l.* 0*s.* 2*d.*; from the Commissioners of Public Works, 4,540*l.*; deductions from Mr. Harrison's contract, 72*l.* 4*s.* 4*d.*. The expenses have been 13,465*l.* 10*s.* 5*d.*, leaving 1,591*l.* 3*s.* 7*d.* due to the churchwardens.

Wick.—Application is to be made to Government for a supply of convict labour for the erection of a breakwater in the bay of Wick, for a harbour of refuge to shipping in general on that coast.

Belfast.—In this bright spot amid the waste of unhappy Ireland, new proofs of a thriving and vigorous vitality are ever and anon appearing; one of the most auspicious of which is the completion of an extensive and complete iron foundry, with "a forest of tall and graceful chimney stalks," as the *Belfast News Letter* describes it, "rearing their towering points over an extensive area, for the most part occupied by sheds supported by metal columns and girders, and by all the usual, but in this place novel, accessories of a first-rate wrought-iron foundry." Here on Monday week the first boiler-plate ever rolled in Ireland was turned out by the stalwart arms of the Marquis of Downshire, who doffed his "Irish frieze" and tucked up his "Irish linen" manfully for the occasion. It appears that both iron and coal will shortly be supplied in abundance from the neighbouring counties.

Kilkenny.—Messrs. R. and H. Preston, having renewed their search for ancient monuments at the houses on the west side of Friar-street, within the original precinct of the Dominican Abbey, succeeded, on Wednesday evening, in bringing to light a very handsome tomb, at a depth of two feet beneath the floor of another room of the same house in which the former discoveries were made, last September. It is a coffin-shaped slab, of the

thirteenth century, ornamented with a floriated cross of unique pattern, in relief, but without inscription or armorial bearings. A regularly arched vault has been found at some distance beneath, but it is feared that the strength of the water which bursts up everywhere on excavating in the locality will prevent any further search from being carried out. The tomb has been removed into the present abbey enclosure, in order to its preservation.—*Kilkenny Moderator.*

Taunton.—The Commissioners of the Taunton Turnpike Trusts have erected five toll-houses in Taunton and its neighbourhood, within as many years, the designs for which were furnished by a journeyman carpenter. Some members of this body, not feeling satisfied with the way in which this affair was managed, induced their fellow-commissioners, after much opposition, to offer a premium, viz., the magnificent sum of five guineas for the two best designs for two houses they were about to erect. Four parties competed, two of them only being architects, when Messrs. Foster and Wood's designs were selected; the commissioners at the time giving particulars of the accommodation they required, viz., a collecting-room, living-room, two bedrooms, scullery, pantry, water-closet, and ashpit; also to include a well-pump and drain-grates, shelves, and other fittings to make the houses complete. The walls to be built with rag-stone, with freestone dressings, and limiting the expenditure to 160*l.* per house. The following tenders were sent in:—

	East gate.	South gate.	Total.
J. Corner, Taunton	£291 5 6	182 15 8	474 0 10
G. Pollard, do.	190 0 0	190 0 0	380 0 0
J. Macey, do.	304 0 0	179 10 0	483 10 0
H. E. Hamlin, Bristol	180 0 0	140 0 0	320 0 0
(accepted)	180 0 0	140 0 0	320 0 0

TO REGULATE THE APPARENT HEIGHT OF DISTANT OBJECTS.

THE problem proposed by your correspondent "Ignoramus" in THE BUILDER for November 29, being one which frequently occurs in designing the façade of a building, the following is a general solution:—

PROBLEM.—What must be the height of an object, CD, placed at a horizontal distance, EA, from the eye of a spectator, and at an altitude, AC, in order that it may appear equal to an altitude, AB, at the same horizontal distance from the eye, and on a level with the eye.

In order that CD may appear equal to AB, we must have the angle DEC equal to the angle BEA: from this the height CD may be found by simple geometrical drawing, or it may be calculated as follows:—



The distances EA, AB, AC, are supposed to be given.

$$\begin{aligned}
 CD &= AD - AC \\
 &= EA \times \tan(\angle DEA) - AC \\
 &= EA \times \tan(\angle CEA + \angle BEA) - AC \\
 &= EA \times \frac{\tan(\angle CEA) + \tan(\angle BEA)}{1 - \tan(\angle CEA) \times \tan(\angle BEA)} - AC \\
 &= EA \times \frac{\frac{AC}{EA} + \frac{AB}{EA}}{1 - \frac{AC}{EA} \times \frac{AB}{EA}} - AC \\
 \text{or, } CD &= (EA)^2 \times \left(\frac{AC + AB}{(EA)^2 - AC \times AB} \right) - AC
 \end{aligned}$$

Example—

$$\begin{aligned}
 \text{Let } EA &= 300 \text{ ft., } AC = 50 \text{ ft., } AB = 5 \text{ ft.} \\
 \text{Then, } CD &= (300)^2 \times \frac{50 + 5}{(300)^2 - 50 \times 5} - 50 \\
 &= 5.153 \text{ ft., or nearly } 5 \text{ ft. } 2 \text{ in.}
 \end{aligned}$$

E. W.